



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue
Seattle, Washington 98101

July 16, 2007

Reply To
Attn Of: ETPA-088

Ref: 06-078-AFS

John Newcom, District Ranger
Methow Valley District Ranger
24 West Chewuch Road
Winthrop, WA 98862

Dear Mr. Newcom:

We have reviewed the draft environmental impact statement (DEIS) for the proposed **Tripod Fire Salvage Project** (CEQ No. 20070205) in the Okanogan and Wenatchee National Forests. Our review was conducted in accordance with our responsibilities under National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

Section 309 specifically directs the U.S. Environmental Protection Agency (EPA) to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the EIS prepared for the proposed project will consider the expected environmental impacts, and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

The draft EIS proposes to salvage harvest dead trees and fire-injured trees expected to die within one year, reforest salvage units, treat active fuels and improve public safety by removing danger trees within the Tripod Fire Salvage project area. Four alternatives, including the No Action Alternative, were analyzed in the DEIS. Alternative A is the No Action alternative. Alternative B, the proposed action and the preferred alternative, would salvage harvest 22.8 million board feet (MMBF) from 2,748 acres. Alternative C would avoid salvage harvesting in lynx habitat, including habitat currently in an unsuitable condition. Under this alternative a total of 17.9 MMBF would be harvested on 2,247 acres. Alternative D would increase the amount of salvaged timber available to local and regional economies. Under this alternative a total of 30.5 MMBF would be harvested from 3,404 acres. All of the action alternatives would fall and/or remove danger trees, and provide for planting of salvage units where natural regeneration will be insufficient to ensure reforestation within 5 years.

We commend the Forest Service for the high quality of this DEIS. The document provides a thorough analysis of resources affected by the proposed project, and gives thoughtful treatment to issues raised in the scoping process. We have assigned a rating of LO (Lack of Objection) to the draft EIS. This rating and a summary of our comments will be published in the

Federal Register. A summary of the rating system we used in conducting our review of the DEIS can be viewed at

<http://www.epa.gov/compliance/nepa/comments/ratings.html>.

Although we are registering no formal objections to this analysis, we do continue to have some concerns around the narrowly defined purpose and need for this project, which precludes the consideration of any kind of active restoration, and the future fire risk that may be presented by pursuing active planting. We also note the opportunity presented by this project to help validate and calibrate the Scott Guidelines by monitoring survival of fire-damaged trees across the Tripod burn area. These comments are detailed in the following attachment, and we request that they be addressed in the Final EIS.

Thank you for the opportunity to review this draft EIS. If you would like to discuss the content of this letter, please contact Teresa Kubo of my staff at (503) 326-2859 or feel free to contact me at (206) 553-1601.

Sincerely,

/s/

Christine B. Reichgott, Manager
NEPA Review Unit

Enclosures

EPA Region 10 Detailed Comments on the Tripod Fire Salvage Project Draft EIS

Need for the Proposed Action

The purpose and need as outlined on page S-1 is relatively narrow. In essence, the project would be structured to 1) recover the economic value of a proportion of dead or fire-injured trees; 2) improve public safety by removing hazard trees; and 3) re-establish trees in salvage harvest units where natural regeneration will not occur within 5 years. Because the purpose and need are narrowly defined, the range of alternatives is similarly limited, and does not allow for the consideration of active restoration. Specifically, as noted on 3-195, changes to the transportation network that would reduce effects to aquatic ecosystems are beyond the purpose and need for the project. Given the fact that each of the waterbodies identified in Figure 3.3-5 are either functioning at risk or functioning at unacceptable risk for road density (not meeting riparian management objectives), we question whether the decision to exclude restoration from consideration among the alternatives is fully consistent with direction in the Forest Plan, and responsive to the broader public interest and need.

Similarly we note that road density within Management Area (MA) 26-04 currently exceeds Forest Plan standards, and that it would temporarily increase as a part of any of the action alternatives. Although MA 26-04 would be returned to pre-fire road density once harvest is complete, that density would continue to exceed Forest Plan standards. Because roads and landings cause enduring damage to soils and streams, help spread noxious weeds, and hinder revegetation (Karr et. al 2004) we encourage the Forest Service to consider expanding the purpose and need to reduce road density in those areas currently exceeding plan standards.

Replanting Salvage Units

The DEIS states that there is a need to accelerate reforestation by re-establishing trees in salvage harvest units where there is insufficient seed source. EPA acknowledges that this is consistent both with direction in the Forest Plan and with Regional guidance, but we note that there is an accruing body of science linking post-fire replanting with increased future fire severity (Odion et al. 2004, Thompson et al. 2007). Given this, we encourage the Forest Service to give additional consideration to where and how post-fire planting is conducted, and how future fire risk might be mitigated through planting design.

Use of the Scott Guidelines

We appreciate that the amendment allowing for the harvest of fire-injured trees greater than 21 inched diameter at breast height (dbh) with a low probability of survival (as defined by the Scott Guidelines) is a project-specific amendment. We concur that the proposed amendment should apply to, and only for the duration of, the Tripod Salvage Project. As noted by Filip et. al (2007), “the effects of fire on trees depend on several factors. Tree species, size, and age; stand structure; season of burn; weather; fuel loading; topography; and fire severity are among the important variables that determine the degree of injury to trees and probability of immediate or delayed mortality or attack by bark beetles or other opportunistic pests in subsequent years.” Accordingly, the definition of what

constitutes a “dead” tree may vary as these factors change. Likewise, the model best suited to making a prediction about tree mortality may change.

We also note that because it is not possible to account for every combination of variables that could potentially result in tree death, there will always be uncertainty associated with any probabilistic rating system (such as the Scott Guidelines). This uncertainty could be addressed in part by monitoring survival of fire-damaged trees across the Tripod burn (both inside and outside of sale units). Results from these monitoring efforts could be used to help validate and calibrate the Scott Guidelines. Additionally, we note that there have been relatively few studies that discuss empirical data on the effects of post-fire salvage logging. The Tripod Salvage project provides a unique opportunity to examine the effects of salvage logging and restoration planting in a fire prone ecosystem.

References

- Filip, Gregory M., Schmitt, Craig L., Scott, Donald W., Fitzgerald, Stephen A. 2007. Understanding and Defining Mortality in Western Conifer Forests. *Western Journal of Applied Forestry*. Vol. 22 No. 2
- Karr, James R., Rhodes, Jonathan J., Minshall, Wayne, Hauer, Richard, Beschta, Robert L., Frissell, Christopher A., and Perry, David A. The Effects of on Aquatic Ecosystems in the American West. *BioScience*. Vol. 54 No. 11. November 2004, 1029-1033.
- Odion DC, Frost E, Strittholt JR, Jiang H, DellaSala DA, Moritz MA. 2004. Patterns of fire severity and forest conditions in the western Klamath Mountains, California. *Conservation Biology* 18: 927-936.
- Thompson, Jonathan R., Spies, Thomas A., Ganio, Lisa M. 2007. Reburn severity in managed and unmanaged vegetation in a large wildfire. *PNAS* 104: 10743-10748; published online before print as 10.1073/pnas.0700229104